

WHAT IS CLAIMED IS:

1. Belt-buckle tightener for a seat belt system in a vehicle, having:
 - a rotatable spindle which is connected to a belt buckle via a draw-in cable; and
 - a drive for rotation of the spindle, wherein the spindle and draw-in cable are arranged so that rotation of the spindle results in the draw-in cable being rolled up on the spindle and movement of the belt buckle in a direction that tightens the seat belt, and
 - wherein the drive is integrated in the spindle.
2. Belt-buckle tightener according to Claim 1, further comprising
 - a coupling sleeve which is connected in a rotationally fixed manner to a frame of the vehicle chassis,
 - wherein the spindle is mounted rotatably on the coupling sleeve, and the drive includes a gas generator fastened to the spindle and a driving belt fastened at both ends to the coupling sleeve; and
 - wherein the driving belt is partially wound up on the coupling sleeve and runs around the gas generator when the belt-buckle tightener is not operating, to form a space for receiving gas which is produced by the gas generator so that when gas from the gas generator enters the space the space is enlarged and the driving belt is unwound from the coupling sleeve, thereby producing a driving force and causing the spindle to rotate.
3. Belt-buckle tightener according to Claim 2, wherein the driving belt also runs around one or more guide elements.
4. Belt-buckle tightener according to Claim 2, wherein the coupling sleeve has a longitudinal axis and includes: a cylindrical central section having cylindrical subsections connected thereto, and end sections which are angular in cross-section, wherein the spindle is mounted on the subsections of the coupling sleeve, and the end sections are each retained in cutouts in the frame.

5. Belt-buckle tightener according to Claim 4, the central section having a larger diameter than the subsections.
6. Belt-buckle tightener according to Claim 4, the end sections and the subsections having threaded holes for receiving screws for fastening the coupling sleeve to the frame.
7. Belt-buckle tightener according to Claim 1, the spindle being coupled to a blocking device which blocks rotation of the spindle counter to the rolling-up direction of the draw-in cable and thereby prevents the draw-in cable from unrolling.
8. Belt-buckle tightener according to Claim 7, the blocking device being formed by toothing located on the circumference of the spindle and a corresponding latch on the vehicle chassis, the toothing being positioned so that engagement with the latch only takes place when the spindle is rotated counter to the rolling-up direction of the draw-in cable.
9. Belt-buckle tightener according to claim 1, the spindle having a cutout for receiving an end section of the draw-in cable, the said cutout comprising two sections with different cross-sectional surfaces, so that a shoulder is formed in the cutout, and wherein the end section of the draw-in cable has a larger cross-sectional surface than the remainder of the draw-in cable, and the end section rests on the shoulder and prevents the draw-in cable from becoming detached from the spindle when the draw-in cable is subjected to a tensile load.
10. Belt-buckle tightener according to Claim 9, the cutout running along the circumference of the spindle.
11. Belt-buckle tightener according to Claim 9, the cutout being formed by a radial hole in the spindle.

12. Belt-buckle tightener of claim 1, the draw-in cable runs over a deflection pulley provided on the belt buckle and is fastened at one end to the spindle and at the other end to the vehicle chassis.